

---

THE GENERAL ASSEMBLY OF PENNSYLVANIA

---

HOUSE BILL

No. 1476 Session of  
2023

---

INTRODUCED BY VITALI, WAXMAN, MADDEN, SANCHEZ, HILL-EVANS,  
STEELE, KHAN, BRENNAN, HOWARD, PIELLI, HOHENSTEIN AND  
SALISBURY, JUNE 21, 2023

---

REFERRED TO COMMITTEE ON ENVIRONMENTAL RESOURCES AND ENERGY,  
JUNE 21, 2023

---

AN ACT

1 Providing for a moratorium on electric generating facility that  
2 provides, in whole or in part, behind-the-meter electric  
3 energy consumed or utilized by a qualifying crypto-asset  
4 mining operation and for an impact study; and imposing duties  
5 on the Department of Environmental Protection.

6 The General Assembly of the Commonwealth of Pennsylvania  
7 hereby enacts as follows:

8 Section 1. Short title.

9 This act shall be known and may be cited as the  
10 Cryptocurrency Energy Conservation Act.

11 Section 2. Declaration of policy.

12 The General Assembly finds and declares as follows:

13 (1) Climate change is the most serious long-term threat  
14 to this planet.

15 (2) The world needs to reach carbon neutrality by mid-  
16 century to avoid the worst effects of climate change.

17 (3) This Commonwealth is a major emitter of greenhouse  
18 gases that contribute to climate change, the vast majority of

1 which are related to the production and consumption of  
2 energy.

3 (4) This Commonwealth is committed to reducing  
4 greenhouse gas emissions within the Commonwealth in order to  
5 help combat climate change, with goals of reducing greenhouse  
6 gas emissions by 26% from 2005 levels by 2025 and further  
7 reducing greenhouse gas emissions by 80% from 2005 levels by  
8 2050 under Executive Order 2019-01.

9 (5) Recently, cryptocurrency mining has expanded greatly  
10 in the United States and this Commonwealth, with several  
11 major cryptocurrency mining operations expected to come  
12 online in this Commonwealth over the next several years.

13 (6) Cryptocurrency mining refers to the process of  
14 creating new units of cryptocurrency and verifying  
15 transactions by using computers to solve complicated  
16 calculations.

17 (7) Cryptocurrency mining requires a substantial amount  
18 of energy and currently accounts for as much as 1.7% of  
19 energy consumption in the United States, according to a White  
20 House report.

21 (8) The cryptocurrency mining industry currently  
22 operates with little governmental oversight or regulation.

23 (9) The massive use of energy to produce cryptocurrency  
24 is a wasteful use of finite resources.

25 (10) Unchecked cryptocurrency mining in this  
26 Commonwealth will prevent this Commonwealth from reaching its  
27 stated greenhouse gas emissions reduction goals.

### 28 Section 3. Definitions.

29 The following words and phrases when used in this act shall  
30 have the meanings given to them in this section unless the

1 context clearly indicates otherwise:

2 "Blockchain." A distributed ledger technology in which:

3 (1) the data are shared across a network that creates a  
4 digital ledger of verified transactions or information among  
5 network participants; and

6 (2) the data are typically linked using cryptography to  
7 maintain the integrity of the ledger and execute other  
8 functions, including transfer of ownership or value.

9 "Consensus mechanism." A process to achieve agreement among  
10 network participants on the current state of a blockchain.

11 "Crypto-asset mining." The process of performing  
12 computations to add a valid block of data to the blockchain  
13 typically in exchange for a reward or fee, including a proof of  
14 work consensus mechanism and excluding those computations  
15 required to validate individual transactions.

16 "Department." The Department of Environmental Protection of  
17 the Commonwealth.

18 "Power load." The amount of electrical power, in megawatts,  
19 that is consumed by a qualifying crypto-asset mining operation.

20 "Qualifying crypto-asset mining operation." The term means:

21 (1) an individual crypto-asset mining operation located  
22 in this Commonwealth that has a power load that is greater  
23 than or equal to 5 megawatts;

24 (2) a crypto-asset operation located in this  
25 Commonwealth comprised of more than one location that has a  
26 cumulative power load that is greater than or equal to 5  
27 megawatts; or

28 (3) a crypto-asset mining operation located at a natural  
29 gas well site in this Commonwealth.

30 "Scope 1 emissions." Greenhouse gas emissions directly from

1 sources that are operated, controlled or owned by an individual  
2 or entity performing a qualifying crypto-asset mining operation.

3 "Scope 2 emissions." Indirect greenhouse gas emissions  
4 associated with the purchase of electricity, steam, heat or  
5 cooling by an individual or entity performing a qualifying  
6 crypto-asset mining operation.

7 Section 4. Moratorium.

8 Notwithstanding any other provision of law, for two years  
9 following the effective date of this section, the department may  
10 not approve an application for a new permit or renew an existing  
11 permit under the act of January 9, 1959 (P.L.2119, No.787),  
12 known as the Air Pollution Control Act, including, but not  
13 limited to, section 6.1 of the Air Pollution Control Act, for an  
14 electric generating facility that provides, in whole or in part,  
15 behind-the-meter electric energy consumed or utilized by a  
16 qualifying crypto-asset mining operation.

17 Section 5. Reporting requirements for qualifying crypto-asset  
18 mining operations.

19 (a) Reporting.--No later than six months following the  
20 effective date of this subsection, the owner of a qualifying  
21 crypto-asset mining operation in this Commonwealth shall submit  
22 the following information to the department on a form prescribed  
23 by the department:

24 (1) the number and geographic locations of the  
25 qualifying crypto-asset mining operation;

26 (2) the number and type of devices engaged in crypto-  
27 asset mining, purchased and retired by the qualifying crypto-  
28 asset mining operation in the past year;

29 (3) the amount of electric energy consumed by the  
30 qualifying crypto-asset mining operation, including the time

1 of electricity usage;

2 (4) the source or sources of electric generation for all  
3 electric energy consumed by the qualifying crypto-asset  
4 mining operation, including the type of fuel used by the  
5 electric generating facility;

6 (5) scope 1 emissions and scope 2 emissions associated  
7 with electric generation for all electricity consumed by the  
8 qualifying crypto-asset mining operation;

9 (6) water use associated with cooling crypto-asset  
10 mining devices used by a qualifying crypto-asset mining  
11 operation; and

12 (7) any other information deemed necessary by the  
13 department.

14 (b) Ongoing reporting requirements.--

15 (1) Prior to starting operations in this Commonwealth, a  
16 qualifying crypto-asset mining operation shall submit the  
17 information required under subsection (a) to the department.

18 (2) The department shall require a qualifying crypto-  
19 asset mining operation to submit the information under  
20 subsection (a) on an annual basis.

21 (c) Form.--The department shall prepare a form that includes  
22 all of the information required under subsections (a) and (b) to  
23 make available on the department's publicly accessible Internet  
24 website.

25 Section 6. Impact study.

26 (a) Report.--No later than one year following the effective  
27 date of this subsection, the department, in consultation with  
28 the Pennsylvania Public Utility Commission, shall issue a  
29 report, including all of the following information:

30 (1) The number and location of any existing or planned

1 qualifying crypto-asset mining operations, including which  
2 operations are located in an environmental justice area.

3 (2) The amount of greenhouse gas emissions and other air  
4 pollutants that are:

5 (i) released by an onsite energy source used by a  
6 qualifying crypto-asset mining operation; and

7 (ii) attributable to offsite-generated electricity,  
8 steam, heat or cooling provided to a qualifying crypto-  
9 asset mining operation.

10 (3) The anticipated increase of new, and expansion of  
11 existing, qualifying crypto-asset mining operations.

12 (4) The potential impacts of electric energy consumption  
13 by qualifying crypto-asset mining operations, including by  
14 prolonging the use of fossil fuel generators, on the ability  
15 of this Commonwealth to achieve stated greenhouse gas  
16 emission reduction goals.

17 (5) The ecological impacts, including ecological impacts  
18 associated with electronic waste generation and the use or  
19 discharge of cooling water, caused by qualifying crypto-asset  
20 mining operations.

21 (6) The potential public health impacts due to the  
22 reduced air and water quality and increased water stress on  
23 communities near qualifying crypto-asset mining operations.

24 (7) The potential public health and ecological impacts  
25 from noise generated by qualifying crypto-asset mining  
26 operations.

27 (8) The amount of electric energy consumed by each  
28 qualifying crypto-asset mining operation, including the time  
29 of use of electricity and the potential grid stress posed by  
30 the power load of the qualifying crypto-asset mining

1 operation.

2 (9) The source of electric energy consumed by each  
3 qualifying crypto-asset mining operation.

4 (10) An analysis of energy use and greenhouse gas  
5 emissions by type of consensus mechanism.

6 (11) An analysis of demand-response programs negotiated  
7 between qualifying crypto-asset mining operations and  
8 electric utilities.

9 (12) An analysis of potential rate-design measures that  
10 could be implemented by State and local regulators to reduce  
11 the energy consumption and dependence on fossil fuel energy  
12 sources of qualifying crypto-asset mining operations.

13 (b) Report submission.--The department shall submit the  
14 report required under subsection (a) to the Governor, the  
15 chairperson and minority chairperson of the Environmental  
16 Resources and Energy Committee of the Senate and the chairperson  
17 and minority chairperson of the Environmental Resources and  
18 Energy Committee of the House of Representatives no later than  
19 one year following the effective date of this subsection.

20 (c) Publication.--The department shall publish the report  
21 required under subsection (a) on the department's publicly  
22 accessible Internet website.

23 Section 7. Regulations.

24 The department and the Environmental Quality Board shall  
25 promulgate regulations as necessary to implement the provisions  
26 of this act.

27 Section 8. Effective date.

28 This act shall take effect immediately.